AMENDMENTS TO THE CLAIMS

1. (Currently amended) A method of enhancing the immune response to an immunogen in a mammal, ~~wherein~~ said method ~~comprises~~ comprising providing to said mammal ~~the following polypeptides:~~

~~(a) an~~

(i) said immunogen; ~~(b)~~ Flt3L or a biologically active fragment thereof; and ~~(c)~~ MIP-1α, MIP-3α, or a biologically active fragment ~~thereof.~~ thereof; or

(ii) at least one nucleic acid molecule encoding at least one of (a) said immunogen; (b) Flt3L or a biologically active fragment thereof; and (c) MIP-1α, MIP-3α, or a biologically active fragment thereof; and each polypeptide of (a), (b), or (c) not encoded by said at least one nucleic acid molecule.

2-4. (Canceled).

5. (Currently amended) The method of claim 1 ~~or 2~~, wherein said Flt3L and said MIP-1α or MIP-3α are provided in a therapeutically effective amount to augment ~~the~~ a T cell response in said mammal, wherein said T cell response is a CD4+ T cell response, a CD8+ T cell response, or both.

6. (Canceled).

7. (Currently amended) The method of claim 5 ~~or 6~~, wherein said T cell response is augmented by at least 20% relative to an untreated control.

8. (Currently amended) The method of ~~claim 6~~ claim 7, wherein said T cell response is augmented by at least 40% relative to an untreated control.

9. (Currently amended) The method of ~~any one of claims 1-4~~ claim 1, wherein said ~~Flt-3L~~ Flt3L, said MIP-1α, or said MIP-3α polypeptide or biologically active fragment thereof is a human, mouse, rat, or monkey polypeptide.

10-11. (Canceled).

12. (Currently amended) The method of ~~any one of claims 1-4~~ claim 1, wherein said ~~Flt-3L~~ Flt3L, said MIP-1α, or said MIP-3α polypeptide is ~~the~~ a full length ~~Flt-3L~~ polypeptide.

13-14. (Canceled).

15. (Currently amended) The method of ~~any one of claims 1-4~~ claim 1~~,~~ further comprising a step of administering ~~wherein~~ an additional adjuvant ~~is further administered~~ to said mammal.

16. (Previously presented) The method of claim 15, wherein said adjuvant is GM-CSF or a biologically active fragment thereof.

17. (Currently amended) The method of ~~any one of claims 1-4~~ claim 1, wherein at least two immunogens are provided to said mammal.

18. (Canceled).

19. (Currently amended) The method of ~~any one of claims 1-4~~ claim 1, wherein said mammal is a human.

20. (Currently amended) The method of ~~any one of claims 1-4~~ claim 1, wherein said mammal is a neonate.

21. (Previously presented) The method of claim 20, wherein said method is to prevent viral transmission during breastfeeding.

22. (Currently amended) The method of ~~any one of claims 1-4~~ claim 1, wherein said method is used to treat or prevent a microbial ~~infections~~ infection.

23. (Currently amended) The method of claim 22~~, wherein said method~~ further ~~comprises~~ comprising administering a second anti-microbial therapeutic ~~regimen~~.

24. (Currently amended) The method of claim 23, wherein said second therapeutic ~~regimen~~ is administered within one week of ~~before or after~~ said providing.

25. (Previously presented) The method of claim 22, wherein said microbial infection is bacterial, viral, fungal, or parasitic.

26. (Previously presented) The method of claim 25, wherein said viral infection is an HIV infection.

27. (Currently amended) The method of claim 22, wherein said immunogen is ~~an antigen~~ substantially identical to ~~said immunogen is~~ an antigen associated with said ~~present in~~ microbial ~~infections~~ infection.

28. (Currently amended) The method of claim ~~22~~ 27, wherein said antigen is gp160, p24 VLP, gp41, p31, p55, gp120, Tat, gag, pol, env, nef, rev, or VaxSyn.

29. (Currently amended) The method of ~~any one of claims 1-4~~ claim 1, wherein said method is used to treat or prevent autoimmune disease, tissue rejection, or allergic reaction.

30. (Currently amended) The method of claim 29~~, wherein said method~~ further ~~comprises~~ comprising administering a second therapeutic for treatment of said autoimmune disease, tissue rejection, or allergic reaction ~~regimen~~.

31. (Currently amended) The method of claim 30, wherein said second therapeutic ~~regimen~~ is administered within one week of ~~before or after~~ said providing.

32. (Currently amended) The method of claim 29, wherein said immunogen is ~~an antigen~~ substantially identical to an antigen associated with said ~~immunogen is present in~~ autoimmune disease, tissue rejection, or allergic reaction.

33. (Currently amended) The method of ~~any one of claims 1-4~~ claim 1, wherein said method is used to prevent or treat cancer.

34. (Currently amended) The method of claim 33~~, wherein said method~~ further ~~comprises~~ comprising administering a second anti-cancer therapeutic ~~regimen~~.

35. (Currently amended) The method of claim 34, wherein said second anti-cancer therapeutic ~~regimen~~ is administered within one week of ~~before or after~~ said providing.

36. (Currently amended) The method of claim 33, wherein said cancer is selected from the group consisting of melanoma, breast cancer, pancreatic cancer, colon cancer, lung cancer, glioma, hepatocellular cancer, endometrial cancer, gastric cancer, intestinal cancer, renal cancer, prostate cancer, thyroid cancer, ovarian cancer, testicular cancer, liver cancer, head and neck cancer, colorectal cancer, esophagus cancer, stomach cancer, eye cancer, bladder cancer, glioblastoma, and metastatic carcinoma.

37. (Currently amended) The method of claim 33, wherein said immunogen is ~~an antigen~~ substantially identical to an antigen associated with said ~~immunogen is present in~~ cancer.

38. (Previously presented) The method of claim 37, wherein said antigen is selected from the group consisting of Melan-A, tyrosinase, p97, β-HCG, GalNAc, MAGE-1, MAGE-2, MAGE-3, MAGE-4, MAGE-12, MART-1, MUC1, MUC2, MUC3, MUC4, MUC18, CEA, DDC, melanoma antigen gp75, Hker 8, high molecular weight melanoma antigen, K19, Tyr1 and Tyr2, members of the pMel 17 gene family, c-Met, PSA, PSM, α-fetoprotein, thyroperoxidase, gp1000, NY-ESO-1, telomerase, C25 colon carcinoma, and p53.

39. (Canceled).

40. (Currently amended) The method of ~~any one of claims 1-4~~ claim 1, wherein said providing is performed using a single ~~polypeptides are provided in the same~~ formulation.

41. (Currently amended) The method of ~~any one of claims 1-4~~ claim 1, wherein said providing is performed using ~~polypeptides are provided in~~ at least two separate formulations.

42. (Currently amended) The method of claim 41, wherein said ~~polypeptides~~ formulations are provided by the same route of administration.

43. (Currently amended) The method of ~~any one of claims 1-4~~ claim 1, wherein said providing is by ~~polypeptides are suitable for~~ injection intradermally, intramuscularly, subcutaneously, or intravenously.

44. (Currently amended) The method of claim 1 ~~or 2~~, wherein at least one of said nucleic acid molecules is an ~~polypeptides is provided to said mammal by providing at least one~~ expression vector comprising ~~a polynucleotide sequence operably linked to~~ a regulatory ~~elements~~ element operably linked to a~~, wherein said~~ polynucleotide sequence encoding any of the polypeptides of (a)-(c). ~~encodes:~~

~~a) an immunogen;~~

~~b) MIP-1α or a biologically active fragment thereof; or~~

~~c) Flt3L or a biologically active fragment thereof.~~

45. (Canceled).

46. (Currently amended) The method of claim 44 ~~or 45~~, wherein said expression vector is a viral, a bacterial, or a plasmid vector.

47. (Currently amended) The method of claim 46, wherein said viral vector is selected from the group ~~comprising~~ consisting of an adenovirus, a poxvirus, and a lentivirus.

48. (Currently amended) The method of claim 44 ~~or 45~~, wherein at least 0.2 ug of expression vector is provided.

49. (Currently amended) The method of ~~any one of claims 1-4~~ claim 1~~, wherein said method~~ further ~~comprises~~ comprising administering a booster shot to said mammal.

50. (Previously presented) The method of claim 49, wherein said booster shot is administered within a year of said providing.

51. (Currently amended) The method of claim 49, wherein said booster shot comprises ~~providing to said mammal~~ one or more immunogens.

52. (Currently amended) The method of claim 49, wherein said booster shot comprises ~~providing to said mammal~~ MIP-1α, Flt3L, MIP-3α, or a combination thereof in a therapeutically effective amount.

53. (Currently amended) The method of claim 49, wherein said booster shot comprises MIP-1α and Flt3L; MIP-3α and Flt3L; or MIP-3α, MIP-1α, and Flt3L ~~Flt-3 are provided~~.

54-55. (Canceled).

56. (Currently amended) The method of claim 49, wherein said booster shot ~~is~~ comprises a recombinant vector comprising a polynucleotide sequence operably linked to regulatory elements encoding said immunogen.

57. (Previously presented) The method of claim 56, wherein said recombinant vector is a live recombinant vector selected from a group consisting of an adenovirus, a lentivirus, or a poxvirus.

58. (Previously presented) The method of claim 57, wherein said poxvirus is modified vaccinia virus Ankara, or fowl pox.

59. (Currently amended) The method of claim 56, wherein at least 0.2 ug of said recombinant vector is provided.

60. (Currently amended) The method of claim 57, wherein at least 10^5pfu of said live recombinant vector is provided.

61. (Currently amended) The method of claim 49, wherein said administering of said booster shot results in at least a 2-fold increase in the T cell response in said mammal as compared to the T cell response in a control mammal ~~provided~~ not provided with said booster shot, wherein said T cell response is a CD4+ T cell response, a CD8+ T cell response, or both.

62. (Currently amended) The method of claim 49, wherein said providing ~~polypeptides~~ and said administering of said booster shot are ~~provided~~ by the same route of administration.

63. (Canceled).

64. (Currently amended) The method of claim 49, wherein said booster shot is formulated ~~suitable~~ for injection intradermally, intramuscularly, subcutaneously, or intravenously.